

REMARKS

Prior to entry of this amendment, claims 1-21 are currently pending in the subject application. By this Amendment, the specification and claims 1, 8 and 17 are amended. Claims 8-21 are withdrawn in view of the August 8, 2005 Reply to the July 6, 2005 Restriction Requirement. No new matter is added. Reconsideration of the application is respectfully requested.

Applicants appreciate the Examiner's consideration of the August 8, 2005 Information Disclosure Statement. Applicants request that, in the next Office action, the Examiner confirm receipt and entry of the August 10, 2005 Supplemental Information Disclosure Statement.

Applicants appreciate the Examiner's acknowledgement of Applicants' claim for foreign priority and receipt of a certified copy of the priority document.

Applicants request that, in the next Office action, the Examiner confirm the acceptability of the drawings filed on April 23, 2004.

Claims 1-7 are presented to the Examiner for further prosecution on the merits.

A. Objection to Specification

The specification is objected to for reciting "MCJ layer 6" instead of "MCJ layer 62". The specification is hereby amended responsive to the objection. It is respectfully requested that the objection be withdrawn.

B. Asserted Obviousness Rejection of Claims 1-7

In the outstanding Office action, the Examiner rejected claims 1-7 under 35 U.S.C. § 103(a) as being unpatentable over the Background of the Invention in view of U.S. Patent No. 6,855,563 to Motoyoshi ("the Motoyoshi reference"). It is respectfully submitted that the present

amendment clearly defines the present invention over the applied art for at least the following reasons.

Claim 1 now recites, in part, “the oxidation layer is arranged between the lower magnetic layer and the upper magnetic layer.” As noted, for example, in paragraph [0085] of the original specification, such an arrangement prevents oxidation of the interface of the lower magnetic layer when forming the tunneling oxide layer.

The Examiner recognizes that the Background of the Invention section fails to disclose an oxidation prevention layer, and relies on the Motoyoshi reference as providing this teaching. While the Motoyoshi reference may disclose a cap layer 135, as shown in FIGS. 1A and 1B, the cap layer 135 of the Motoyoshi reference is provided on the storage layer 134, the tunnel insulation layer 133, the magnetization fixed layer 132 and the antiferromagnetic layer 131. Thus, the cap layer 135 is not arranged between a lower magnetic layer and an upper magnetic layer in the Motoyoshi reference, as now clearly recited in claim 1. Further, since the cap layer 135 of the Motoyoshi reference is clearly for preventing mutual diffusion between TMR devices, there is no suggestion to alter the position of the cap layer 135. *See, the Motoyoshi reference, col. 8m, lines 39-41.*

For at least these reasons, Applicants submit that the combination of Motoyoshi and the Background of the Invention section of the above-identified application fails to disclose or suggest all the features of independent claim 1. The remaining rejected claims 2-7 depend from claim 1, and are believed to be allowable for at least the reasons set forth above. Therefore, it is respectfully requested that the rejection be withdrawn.

C. Rejoinder of Non-Elected Claims 8-21

For at least the reasons discussed above, Applicants submit that claim 1, which is directed to a magnetic random access memory (MRAM) having a transistor and a magnetic tunneling junction (MTJ) layer, is allowable. Upon allowance of claim 1, Applicants respectfully request rejoinder and allowance of non-elected claims 8-21, which are directed to a method of manufacturing an MRAM and/or an MTJ layer. Claims 8 and 17 are amended to clearly recite the limitation discussed above, and claim 19 already clearly recites this arrangement.

D. Conclusion

The additional prior art reference cited by the Examiner was not relied on to reject the claims. Therefore, no comments concerning the document are considered necessary at this time.

Since the cited prior art relied on to recite the claims of the subject application fails to render obvious, much less anticipate, the present invention as recited in claims 1-7, applicants respectfully submit that these claims are in condition for allowance and a notice to that effect is respectfully requested.

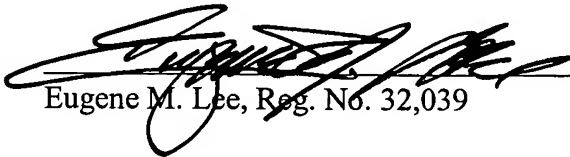
If the Examiner believes that additional discussions or information might advance the prosecution of the instant application, the Examiner is invited to contact the undersigned at the telephone number listed below to expedite resolution of any outstanding issues.

In view of the foregoing amendments and remarks, reconsideration of this application is earnestly solicited, and an early and favorable further action upon all the claims is hereby requested.

Respectfully submitted,

LEE & MORSE, P.C.

Date: December 21, 2005



Eugene M. Lee, Reg. No. 32,039

LEE & MORSE, P.C.
1101 WILSON BOULEVARD, SUITE 2000
ARLINGTON, VA 22209
703.525.0978 TEL
703.525.4265 FAX

PETITION and
DEPOSIT ACCOUNT CHARGE AUTHORIZATION

This document and any concurrently filed papers are believed to be timely. Should any extension of the term be required, applicant hereby petitions the Director for such extension and requests that any applicable petition fee be charged to Deposit Account No. 50-1645.

If fee payment is enclosed, this amount is believed to be correct. However, the Director is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-1645.

Any additional fee(s) necessary to effect the proper and timely filing of the accompanying-papers may also be charged to Deposit Account No. 50-1645.